CHAPTER 1

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CHAPTER 1

GENERAL INFORMATION

1. POLICY

Dependable, well-maintained, precision equipment is essential to the accurate inspection of all commodities[1]. Poorly designed or manufactured equipment and equipment that is excessively worn or misadjusted may cause incorrect factor determinations.

a. Official Equipment. To ensure the accuracy and integrity of official inspections, sampling and inspection equipment used for official purposes must be:

(1) A model and type[2] approved for use by FGIS (see Approved Equipment List, page 1-11);

(2) Installed, aligned, standardized, and calibrated according to the manufacturer's recommendations and the guidelines established by this Handbook, and the appropriate Occupational Safety and Health Administration (OSHA) Standards;

(3) Maintained in good repair;

(4) Tested at periodic intervals, in the prescribed manner, and found to be within tolerance; and

(5) Protected from unauthorized adjustments.

[1] The term "commodities," as used throughout the Handbook, means grain, rice, beans, lentils, and processed grain products.

[2] The mention of firm names or trade products does not imply that they are endorsed or recommended by the U.S. Department of Agriculture over other firms or similar products.

Equipment which has serious operating deficiencies, does not operate within tolerance limitations, or has not been tested when required shall be considered to be not approved for official use and shall be removed from service until a subsequent test establishes its accuracy.

b. Elevator-Owned Equipment. Elevator-owned equipment may be used by agencies for official purposes provided that the above criteria are met. The Field Office Manager should also consider the following guidelines before approving the use of elevator-owned equipment by agencies:

(1) Review each situation, especially the methods that will be used to protect the equipment from misuse or unauthorized adjustments.

(2) At a minimum, the agency should use their own dockage tester sieves, hand sieves, and test weight kettles. These should be kept secure.

(3) Seals should be used on moisture meters, the dockage tester air-baffle, etc.

(4) If precautions are not adequate, do not approve the arrangement.

c. Commercial Equipment. Commercial equipment includes devices that are approved or allowed by local or State weights and measures jurisdictions as "legal for trade." Much of FGIS official equipment meets stricter tolerances or design requirements than commercial equipment; however, commercial equipment may be considered for *Official Commercial Inspection Services*.

d. Government-Owned Equipment Loans.

(1) Government-owned equipment may be loaned to official agencies during legitimate emergencies for short time periods. These temporary loan provisions must be documented.

(2) No open-ended loans are to be approved.

2. RESPONSIBILITIES

a. FGIS Headquarters:

(1) Field Management Division shall:

(a) Foster the development and improvement of inspection equipment.

(b) Identify inspection equipment needs and recommend research projects to TSD.

(c) Announce the approval or rejection of new models and/or types of equipment. Maintain a List of Approved Equipment.

(d) Develop and publish policies and procedures pertaining to the maintenance, repair, and testing of equipment.

(e) Advise the FGIS field offices on the selection and purchase of equipment.

(f) Provide technical assistance to the Standards and Procedures Branch in the development of policies and procedures related to equipment use.

(g) Assist in the purchase of inspection equipment.

(h) Assist the Field Servicing Office (FSO), APHIS, on joint purchase orders, blanket purchase arrangements, and purchases of new types of equipment.

(i) Assist FSO in the negotiation of maintenance contracts with applicable manufacturers.

(2) Technical Services Division shall:

(a) Foster the development and improvement of inspection equipment.

(b) Identify inspection equipment needs and research projects.

(c) Conduct and coordinate research projects to develop and evaluate inspection equipment.

(d) Assist FGIS field offices in the installation, maintenance, and repair of inspection equipment.

(e) Assist the Safety and Health Staff in the evaluation of inspection equipment, investigation of safety problems, and development of policies.

(f) Evaluate alternative testing methods.

(g) Develop policies, procedures, work forms, and schedules for the testing of equipment.

(h) Administer the equipment testing program.

(i) Train field personnel, in cooperation with the Audiovisual, Regulatory Management, and Training Staff.

(j) Maintain the National Standard and Headquarters Standard equipment in good repair and ensure compliance with OSHA Standards.

(k) Test the National Standard and Headquarters Standard equipment.

(l) Provide one (1) set of samples for testing each piece of field office Standard equipment.

(m) Approve or reject field office Standard equipment.

(n) Maintain test records for Headquarters Standard and field office Standard equipment.

b. FGIS Field Offices. The FGIS field offices shall be responsible for all equipment used officially by the field office. Field office equipment includes equipment that is provided for official use by a facility.

(1) Maintain field office equipment in good repair and ensure compliance with OSHA Standards.

(2) Designate an equipment specialist who will serve as the primary contact responsible for equipment testing.

(3) Identify and test field office Standard equipment (equipment aligned with a Headquarters Standard).

(4) Provide one (1) set of samples for testing each piece of field office and agency equipment.

(5) Test field office equipment.

(6) Supervise testing performed by sub-offices and agencies.

(7) Approve or reject FGIS field office, sub-office, and agency equipment.

(8) Maintain test records for FGIS field office, sub-office, and agency equipment.

c. Agencies (and FGIS Sub-Offices). The agencies shall be responsible for all equipment used officially by the agency. Agency equipment includes equipment that is provided for official use by a facility.

(1) Designate an equipment specialist who will serve as the primary contact responsible for equipment testing.

(2) Agencies and sub-offices shall not maintain Standard pieces of equipment, unless specially tested and approved by TSD.

(3) Maintain agency equipment in good repair and ensure compliance with OSHA Standards.

(4) Test agency equipment.

(5) Maintain test records for agency equipment.

3. RECORD KEEPING REQUIREMENTS

a. FGIS Headquarters. The office in charge of the inspection equipment testing program shall maintain completed test forms for at least 5 years from the date of the test for National Standard and Headquarters Standard equipment and field office Standard equipment.

b. FGIS Field Offices. FGIS field offices shall maintain completed test forms for at least 5 years from the date of the test for field office Standard equipment, field office equipment (other than field office Standard), and agency equipment.

c. Agencies. Agencies shall maintain completed test forms for at least 5 years from the date of the test for all of their equipment.

4. EQUIPMENT IDENTIFICATION

a. Serial Number. All equipment which is listed on the testing schedule shall be identified by a serial number. Equipment which does not have a manufacturer's serial number shall be assigned a number by the owner to provide a unique means of identification. That number shall be stamped or stenciled on the piece of equipment in a conspicuous location. In some cases (such as test weight) the same identification number is needed for each separate major part of the apparatus.

b. Test Decal. When a piece of equipment is approved, an FGIS test label (form FGIS-931, "Approved Label for Inspected Machinery," Figure 1) shall be affixed on the device. Equipment which has serious operating deficiencies, does not operate within established tolerances, or which has not been tested according to schedule shall have its past test label(s) removed. The labels are designed to function as security seals; therefore, they are made of tamper-evident materials that will show cracking, tearing, or stretching when an attempt is made to remove them to gain access to internal components.

(1) Complete the new label, showing the name of the testing official, the date the device was approved, and the serial or I.D. number of the unit tested.

(2) Remove the old label(s), whenever practical.

(3) Do not apply the labels side-by-side or stack them excessively. Some stacking of labels is permitted, but not to the extent that may allow the

whole stack to be lifted and reapplied without visible damage (defeating their security aspect).

(4) Clean a conspicuous place on the device, remove backing from the new label and press the label in place.

(5) Rub it back and forth several times to ensure a tight seal.

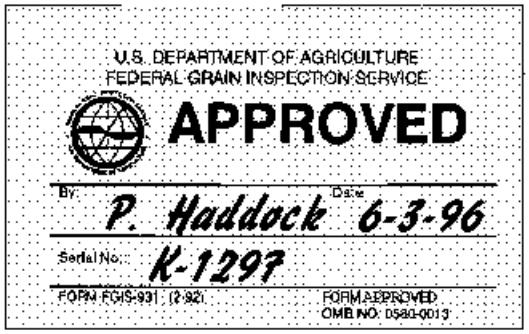

Figure 1, Approved Label for Inspected Machinery, Form FGIS-931

5. EQUIPMENT TESTING

Unless there is a need to know, Standard results or target values should be withheld from the test unit operator until after test completion (blind testing). All equipment should be tested 'as used' whenever possible. For example, dockage testers used for inspecting wheat should be set up for testing with the same sieves that are used for daily inspection work. Test weight per bushel apparatuses should be tested with the same kettle that is used for daily work.

a. Initial Tests. New equipment shall be tested prior to being put into service.

b. Periodic Tests.

(1) Headquarters Standard and Field Office Standard Equipment. This equipment shall be tested periodically in accordance with the testing schedule.

(2) Field Office and Agency Equipment (Other Than The Field Office Standard).

(a) Equipment, other than that which is in storage or used only at seasonal points, shall be tested periodically in accordance with the testing schedule, whenever practical. The field office manager may, at his or her discretion, establish an alternate written schedule provided that the alternate schedule requires the testing of all equipment at least once every 6 months.

(b) Equipment held in storage is not required to be tested until just prior to being put into service.

(c) "Back-up equipment" must be tested on schedule. Untested equipment may not be placed into service under any circumstances.

(d) At seasonal inspection offices (those that are open less than 6 months a year), equipment shall be tested once a year just prior to reactivation of the office.

c. Supplemental Tests. Equipment shall be tested as soon as practicable whenever:

(1) FGIS Headquarters, an FGIS field office, or an agency has comparative inspection results or other information that shows the equipment to be of questionable accuracy;

(2) it becomes apparent that the equipment has not been tested in accordance with the established testing schedule;

(3) after any repairs or alterations (replacement of a minor part will not require the equipment to be retested); or

(4) after rough handling during movement or shipping.

6. TESTING SCHEDULE

Testing Schedule		
Month	Field Office Standard	Agency and Field Office other than Standards
January	Test Weight Apparatuses	Rice Equipment
February	See Moisture HB	Test Weight Apparatuses & Lab Grain Test Scales
March	Barley Pearlers	See Moisture HB
April	Dockage Testers	Barley Pearlers
May		Dockage Testers & 9 Chess Sieve
June	Rice Equipment	Sampling Equipment
July	Test Weight Apparatuses	Rice Equipment
August	See Moisture HB	Test Weight Apparatuses & Lab Grain Test Scales
September	Barley Pearlers & Hand Sieves	See Moisture HB
October	Dockage Testers	Barley Pearlers & Hand Sieves
November		Dockage Testers
December	Rice Equipment	Sampling Equipment

a. Artificial Lighting Tests. This equipment shall be tested upon installation, after remodeling or other alterations, and periodically thereafter, at the discretion of the field office or agency manager.

b. Mechanical Sampling System Tests and Examinations. Each sampling system shall be tested prior to initial authorization for use and examined periodically thereafter, according to the Mechanical Sampling Systems Handbook.

c. Moisture Meter Testing, Near Infrared Analyzers, Falling Number Apparatuses, Aflatoxin Equipment, etc., are covered by separate Handbooks and Instructions.

d. Field Standard and Laboratory Counterbalance Weights. These weights shall be reverified by a National Institute of Standards and Technology (NIST)-certified State Weights and Measures Metrology Laboratory at least each 3 years to ensure that they are within NIST Class F tolerances.

7. REPAIRS

a. Safety. Before repairing any equipment, read the instructions in the appropriate handbook section. Unplug equipment before beginning adjustments or repairs. If equipment is hard-wired or has the potential to release stored mechanical or electrical energy, consult the local Collateral Duty Safety Officer and follow approved lockout/tagout procedures.

b. Equipment Specialists should receive the training, tools, and supplies needed so they are able to perform the adjustments, alterations, and repairs described in this handbook. More extensive repairs should be sent for repair per the manufacturer's or supplier's recommendations.

c. Repair of FGIS-owned moisture meters shall be performed by factory-approved repair facilities only. Equipment Specialists are not authorized to repair meters due to the difficulty in aligning repaired meters and other considerations, including program costs.

APPROVED EQUIPMENT LIST

The Approved Equipment List has been removed from this electronic version of the Equipment Handbook and posted separately at:

http://www.usda.gov/gipsa/progser/metheqp/biglist.htm